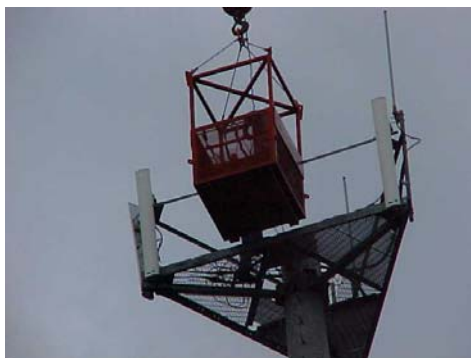
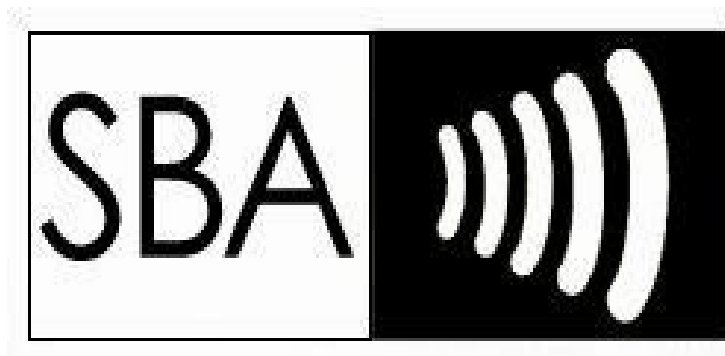


PERSONNEL HOISTING SOP



“It is the policy of SBA Telecommunications, Inc., and its Affiliates, (Collectively “SBA”) to provide a safe and healthy work environment for the protection of our most vital resource – our employees. The safety of employees is of great interest to all levels of management and supervision.”

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Personnel Hoisting Program

1 SCOPE AND APPLICATION

This program is intended to inform all personnel techniques involved during hoisting personnel procedures using cranes, man-rated hoists, and or gin poles to perform their work safely. This program is applicable to all employees and contractors of SBA Telecommunications, Inc. (Collectively, “SBA”) who use the hoist line for accessing tower workstations over 100 feet in height. For tower workstations below 100 feet “Riding the line” and the use of man baskets for hoisting personnel shall only be allowed with prior approval of the SBA Health and Safety Department. All equipment used for the hoisting of personnel to the work area of the tower shall comply with OSHA Directive CPL 2-1.29, ANSI – B30.7, 29 and CFR 1926.550 and Subpart M (Fall Protection Standard).

2 REFERENCES

- OSHA, Directive Number: CPL 2-1.29
- OSHA, Telecommunication Tower Inspection Checklist
- 29 CFR 1926.550
- 29 CFR 1926 Subpart M

3 DEFINITIONS

The following definitions are as defined in the above referenced material.

Crew Chief - one, who is authorized, designated, deemed competent and qualified by the employer.

Anti-Two Block - a positive acting device that prevents contact between the load block or overhaul ball and the top block (two-blocking), or a system that deactivates the hoisting action before damage occurs in the event of a two-block situation.

Maximum intended Load - the total load of all employees, tools, materials, load lines and other loads reasonably anticipated to be applied to the hoist apparatus when an employee is hoisted.

Competent Person - one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees and who has authorization to take prompt corrective measures to eliminate problems.

Authorized Person - a person approved or assigned by the employer to perform a specific type of duty or duties or to be at a specific location or locations at the job site.

Qualified - one who, by possession of a recognized degree, certificate or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work or the project.

Safety Factor – means the ratio of the ultimate breaking strength of a member or piece of material or equipment to the actual working stress or safe load when in use.

Gin Pole - A device attached to the tower used to raise sections of tower steel or equipment into position.

4 RESPONSIBILITIES

Program responsibilities are defined below for the individuals designated to ensure the proper implementation of this program.

4.1. Regional Health and Safety Manager:

- 4.1.1. Ensure all management and affected employees are aware of the Hoisting Personnel Program and enforce the same.



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- 4.1.2. Ensure the proper materials and hardware are properly utilized and maintained for effective implementation of this program.
- 4.1.3. Periodically review worksites for compliance with this program.

4.2. Supervisors and Crew Leaders:

- 4.2.1. Be knowledgeable of Hoisting Personnel Program requirements.
- 4.2.2. Evaluate hazards during the Pre-Work Assessment Survey.
- 4.2.3. Document all pre-lift meetings; proof tests, trial lifts, and inspections using the provided permit system.
- 4.2.4. Ensure all affected employees follow the procedures set forth in this program.

4.3. Hoist/Crane Operator

- 4.3.1. The hoist operator shall be responsible for those operations under his/her direct control. Whenever there is any doubt as to safety, the operator shall have the authority to stop and refuse to handle the load until safety has been assured.
- 4.3.2. The hoist operator shall remain at the controls at all times when personnel are on the hoist line.
- 4.3.3. Before starting the hoist, the operator shall ensure that:
 - The proof test, trial lift, and daily inspection have been conducted,
 - All controls are in the "off" position; and,
 - All personnel are in the clear.

4.4. Employees:

- 4.4.1. Actively participate in the required training and meetings for this program and adhere to the safe operating guidelines contained within this program.
- 4.4.2. Inspect personal fall protection equipment prior to use.
- 4.4.3. Report any defects found to any equipment involved in the hoisting of personnel to their supervisor.

5 RIDING THE LINE REQUIREMENTS

5.1. General Requirements

When hoisting employees the following shall be followed:

- 5.1.1. Personnel platforms must be used to hoist more than one employee to the workstation except where conditions or circumstances preclude its use.
- 5.1.2. All personnel being hoisted shall wear full body harness equipped with two side rings, and at least one front and one back D-ring.
- 5.1.3. Hoisted personnel shall be attached to the hook and the back D-ring with a lanyard.
- 5.1.4. All employees will inspect and document Personal Fall Protection Equipment using the checklist provided by SBA.



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- 5.1.5. The safety hook on the hoist line must be locked in a closed position.
- 5.1.6. Maximum rate of travel for hoisting personnel is below:

Situation	Rate of Travel
Tag/Guide Line in use	200 feet per minute
Without Tag/Guide Line	100 feet per minute
50 feet within the top of the block/rooster head	50 feet per minute

- 5.1.7. Friction lower (free spooling) is prohibited.
- 5.1.8. The operator will ensure there are always at least three full wraps of wire rope on the hoist drum when personnel are being hoisted.
- 5.1.9. No load shall be raised or lowered when hoisting employees.
- 5.1.10. Employees must maintain 100% tie-off while moving between the hoist line and the tower.

5.2. Permit System

- 5.2.1. A Riding The Line permit (Appendix A) shall be completed whenever employees will be hoisted to a tower workstation. This permit will be used to ensure acceptable conditions have been satisfied to comply with this program.
- 5.2.2. The crew shall complete the permit prior to hoisting personnel.
- 5.2.3. The Supervisor and crew shall approve the permit before any personnel are hoisted.
- 5.2.4. The permit shall be posted at the jobsite. All permits will be maintained on site until the project is complete. Once the job is complete the permits should be maintained in the job file.

5.3. Equipment

5.3.1. General Requirements

- 5.3.1.1. The use of ropes and capstan hoist are strictly prohibited.
- 5.3.1.2. The personnel load capacity and material capacity of the lifting system in use shall be posted at the operator's location. If the lifting system is changed the posted capacity must change. Rated load capacities, recommended operating speeds, and special hazard warnings or instructions shall be conspicuously posted on all hoists. Personnel load capacity for the current configuration of the gin pole shall be posted within sight of the hoist operator
- 5.3.1.3. The rigging, hoist line and slings shall have a factor of safety of 10 against failure during personnel lifts. Example (Two employees plus equipment are 400 pounds. All rigging, hoist line and slings must be rated for 4000lbs.)
- 5.3.1.4. The operator shall reduce the hoist capacity load rating in half when hoisting personnel. Example: (A hoist has a normal operating capacity of 11,000 pounds when hoisting personnel this hoist is now rated for 5,500 pounds.)
- 5.3.1.5. The use of spin-resistant wire rope is prohibited. The hoist line shall be equipped with a swivel to prevent any rotation of employees.



5.3.1.6. Guide-lines (tag lines) shall be used to prevent employees from contacting the tower during hoisting. Specific circumstances or condition that preclude its use must be documented.

5.3.2. Wire Ropes and Rigging

5.3.2.1. The Supervisor and crew will inspect all wire rope and rigging daily immediately following the proof test and trail lift. Wire ropes and rigging shall be inspected in accordance with the guidelines in Appendix E.

5.3.2.2. Only qualified persons will fabricate eyes in the wire rope. The eyes shall be fabricated with thimbles and be made with swaged-typed fittings. Factory made eyes will be allowed.

5.3.2.3. All wire rope, sheaves, blocks, and other rigging equipment shall be stored in a manner to prevent damage to the equipment.

5.3.3. Gin Pole

5.3.3.1. Gin Poles shall be used in a manner designed by a professional engineer/manufacture. The crew will ensure the gin pole/rooster head is maintained and serviced according to the manufacturer's recommendations.

5.3.3.2. The lifting capacity (load charts) shall be available at the jobsite and posted at the operator's station.

5.3.3.3. There shall be a minimum of two attachment points (top and bottom).

5.3.3.4. The supervisor will inspect the gin pole before each use. Inspection guidelines are located in Appendix E.

5.3.4. Hydraulic Hoists (Drum Hoists)

5.3.4.1. The operating manual developed by the manufacturer for the specific make and model hoist being used shall be maintained at the site at all times along with the maintenance log book for the hoist. The hoist used for personnel lifting shall meet the applicable requirements for design, construction, installation, testing, inspection, maintenance, modification, repair and operations as prescribed by the manufacturer. Where manufacturers' specifications are not available, the limitations assigned to the equipment shall be based on the determinations of a registered professional engineer.

5.3.4.2. The supervisor or competent person shall visually inspect the hoist each day.

5.3.4.3. The crew will ensure the hoist positioned is level and that the distance between the hoist and the foot block at the tower base will allow proper spooling of the wire rope.

5.3.4.4. The foot block shall be anchored to prevent displacement and be supported to maintain proper alignment.

5.3.4.5. The hoist shall be installed following the manufacturer's mounting procedure.

5.3.4.6. The hoist shall be anchored so as to resist at least two times any reaction induced at the maximum attainable line pull and shall be anchored so that the hoist will not twist or turn. When the hoist is mounted to a truck chassis, it shall be properly aligned and anchored in at



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least two corners to prevent movement, and the wheels of the trucks or trailers shall be properly chocked. The crew will ensure trucks with standard transmissions are engaged.

- 5.3.4.7. All rotating parts or moving parts (belts, gears, shafts, pulleys, drums) must be totally enclosed to prevent incidents. The exhaust pipes shall also be guarded.
- 5.3.4.8. Any hoist that has been modified or repaired must be proof-tested to 125% of its rated capacity.
- 5.3.4.9. The hoist shall have an hour meter and a line speed limiter. The hour meter is key element for preventative maintenance.
- 5.3.4.10. The hoist shall be designed for and must use powered lowering.
- 5.3.4.11. The operator's station shall have a useable fire extinguisher of a 5BC rating or higher.

5.3.5. Hoist Controls

- 5.3.5.1. Power plant controls shall be within easy reach of the operator and shall include a means to start and stop, control speed of internal combustion engines, stop prime mover under emergency conditions, and shift selective transmissions.
- 5.3.5.2. All controls shall be clearly marked, visible, and located within easy reach of the operator. Foot-operated pedals, where provided, shall be constructed and maintained so the operator's feet will not readily slip off and the force necessary to move the pedals can be easily applied.
- 5.3.5.3. The controls shall be self-centering controls (i.e., "deadman" type) that will return the machine to neutral and engage the drum brakes if the control lever is released.

5.3.6. Anti-Two Blocks

- 5.3.6.1. All hoists shall have an anti-two block device except where radiation frequency (RF) precludes that use. When RF inhibits the anti-two block use a cable marking system or an employee situated on the tower observing the top block that has radio contact with the hoist operator.

5.4. Pre-Lift Meeting

- 5.4.1. The supervisor will conduct a pre-lift meeting prior to the load test, trial lift, and inspection. The pre-lift will be repeated each time a lift is performed from a new location, or new day or when a new employee is assigned to the operation.
- 5.4.2. The supervisor, hoist operator, and employees will attend the meeting to discuss the following:
 - Communications
 - Verbal/Hand Signals/Radio
 - Hoisting Procedures
 - Lift Test, Proof Test, and Inspections

5.5. Proof Testing, Trial Lift, and Inspections

- 5.5.1. Immediately prior to placing personnel on the hoist line the supervisor with the crew shall conduct a trial lift, proof test, and inspection. All proof tests, trial lifts, and inspections shall be documented and remain on site until the project is complete.



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- 5.5.2. The crew will conduct a proof test to 125% of the greatest anticipated load by holding it in a suspended position for five minutes with an evenly distributed load. This test can be accomplished using a dynamometer at the base of the tower or using a pre-determined load. Example (Two employees plus equipment are 400 pounds. The load weight for the proof test must be 500 pounds. $400 \times 1.25 = 500$.)
- 5.5.3. Once the proof test has been conducted the crew will perform a trial lift. The trial lift will be performed from the ground to the location to which the employees will be hoisted. The hoist operator shall determine that no interference exists.
- 5.5.4. After the proof test and trial lift are complete the competent person shall perform an inspection of the following areas:
 - Wire ropes and rigging; Wire ropes are properly seated on drums and sheaves.
 - Hoist, Base support, Foundation
 - Multiple part lines are not twisted.
- 5.5.5. If defects are found during the inspections corrections must be made and the proof test, trial lift, and inspection must be repeated. Also the proof test, trial lift, and inspections must be repeated whenever the hoist is moved. When the project requires multiple days the proof test, trial lift, and inspection must be repeated each day.

5.6. Communications

- 5.6.1. Employees being hoisted shall remain in continuous sight of and/or in direct communication with the operator or signal person.
- 5.6.2. In those situations where direct visual contact with the operator is not possible and the use of a signal person would create a greater hazard for the person being hoisted, direct communication alone, such as by radio, shall be used.
- 5.6.3. Employees will use industry standard hand signals as required by 1926.550(a)(4). The hand signal chart is located in Appendix C.

5.7. Weather Conditions/Energized Power Lines

- 5.7.1. Employees shall not be hoisted during adverse weather conditions (high winds, electrical storms, snow, ice, sleet), or other impending danger, except in the case of emergency employee rescue. The supervisor shall make this determination.
- 5.7.2. The hoist system (gin pole and its base hoists) used to raise and lower employees on the hoist line, shall not be used unless the following clearance distances as recommended by ANSI are maintained at all times during the lift:

Power line voltage phase to phase (kV)	Minimum safe clearance (feet)
50 or below	10
Above 50 to 200	15
Above 200 to 350	20
Above 350 to 500	25
Above 500 to 750	35
Above 750 to 1,000	45



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5.8. Maintenance

- 5.8.1. The hoist shall be serviced and maintained per the manufacturer's recommendations.
- 5.8.2. A hoist logbook shall be used to record all hoist inspections, tests, maintenance and repair. The log shall be updated daily as the hoist is being used and shall be signed by the operator and/or supervisor. Service mechanics shall sign the log after conducting maintenance and repair.

5.9. Hoist Inspections.

5.9.1. Daily Inspection:

- Check engine oil level.
- Check engine coolant levels.
- Check for external oil leaks.
- Check hydraulic oil reservoir level.
- Check all safety devices and brakes for proper functioning.
- Visually inspect for loose or missing structural connections

- 5.9.2. See Appendix D for additional Inspections and Maintenance Guidelines.

5.10. Training

- 5.10.1. Before an employee is allowed to perform any job related to hoisting employees aloft for tower work, the employee shall receive training on safe access pursuant to this program. SBA will provide classroom training for the hoist operator. In addition the operator must have 40 hours experience as a hoist operator with at least 8 hours on specified hoist being used.

6 PERSONNEL PLATFORM/MANBASKET REQUIREMENTS

6.1. General Requirements

- 6.1.1. The use of cranes or derricks to hoist employees on personnel platforms is prohibited except when there is no safe alternative available.
- 6.1.2. Personnel may only be hoisted when the requirements of this program have been fulfilled.
- 6.1.3. Never ride the load.
- 6.1.4. Never ride the ball.

6.2. Permit System

- 6.2.1. A Personnel Platform Hoisting permit (Appendix A) shall be completed whenever employees will be hoisted to a tower workstation. This permit will be used to ensure acceptable conditions have been satisfied to comply with this program.
- 6.2.2. The crew shall complete the permit prior to hoisting personnel.
- 6.2.3. The Supervisor and crew shall approve the permit before any personnel are hoisted.
- 6.2.4. The permit shall be posted at the jobsite. All permits will be maintained on site until the project is complete. Once the job is complete the permits should be maintained in the job file.



6.3. Equipment

6.3.1. Personnel Platform

- 6.3.1.1. The personnel platform must be designed with a minimum safety factor of five and must be designed by a qualified engineer or a qualified person who is competent in structural design. The platform must have a permanent marking or plate showing the rated capacity and the platforms weight. The load of the personnel platform may not exceed its rated capacity.
- 6.3.1.2. The suspension system must be design to minimize tipping due to movement of the personnel.
- 6.3.1.3. The personnel platform must be provided with standard guardrail system that is enclosed from the toeboard to the midrail. The platform will have a grab rail, overhead protection when needed, and adequate headroom. If access gate is provided the gate must have a lock device in place during hoisting.
- 6.3.1.4. Only a qualified welder may perform welds on a personnel platform.

6.3.2. Crane

- 6.3.2.1. The crane shall have a copy of the annual inspection on site.
- 6.3.2.2. The crane must have a boom angle indicator that is visible to the operator. Cranes with telescoping booms must be equipped with a device that clearly shows the boom's extended length, or the load radius must accurately determined before hoisting employees.
- 6.3.2.3. The crane must be equipped with an operational anti-two block. When RF inhibits the anti-two block use a cable marking system or an employee situated on the tower observing the top block that has radio contact with the hoist operator.
- 6.3.2.4. The crane must be within 1% level and outriggers should be placed on uniformed cribbing.
- 6.3.2.5. Hooks shall be equipped with a positive locking safety latch.
- 6.3.2.6. The combined weight of the loaded platform and its rigging must not exceed 50% of the rated capacity of the crane.

6.3.3. Rigging

- 6.3.3.1. When hoisting personnel the wire rope must be capable of lifting seven times the maximum permitted load.
- 6.3.3.2. Bridles used, as a connection for the platform must be not be used for any other purpose.
- 6.3.3.3. When a wire rope bridle is used to connect the platform to the load line, the crew will ensure the bridle legs are connected to a master link or shackle.

6.4. Pre-Lift Meeting

- 6.4.1. The supervisor will conduct a pre-lift meeting prior to the load test, trial lift, and inspection. The pre-lift will be repeated each time a lift is performed from a new location, or new day or when a new employee is assigned to the operation.
- 6.4.2. The supervisor, hoist, and employees will attend the meeting to discuss the following:

- Communications
- Verbal/Hand Signals/Radio
- Hoisting Procedures
- Lift Test, Proof Test, and Inspections

6.5. Pre-Hoisting Requirements

- 6.5.1. In some instances the trial lift and proof test may be conducted concurrently.
- 6.5.2. A proof test will be conducted each day or when moving the crane to new location prior to hoisting personnel.
- 6.5.3. The crew will conduct a proof test of the rigging and personnel platform using the procedure below:
- Load the platform to 125% of its rated capacity. (Example: If the platform is rated for 1000 pounds then load it to 1250.)
 - Suspend the load for 5 minutes.
 - After completed the test a competent should re-inspect the platform and rigging for defects. If defects or problems are detected they must be corrected and the proof test must be repeated. This shall be done until the crew is satisfied with the test.
- 6.5.4. After the proof test the crew must conduct a trial lift. Below are the trail lift procedures:
- Performed from the ground to the location or positions where the platform will be hoisted.
 - The platform must be load with the anticipated lift weight.
 - During the lift the operator must check that all systems, controls, and safety devices are properly functioning and there are no interferences.
 - Once completed the platform will be hoisted a few inches and inspected to ensure that it remains secured.
 - Also a competent person must inspect the crane, platform, and ground to determine if the lift test produced any adverse effects on any components or structure.
- 6.5.5. When crew had performed the proof test and trial lift tasks a final inspection must be made to ensure the following:
- Hoist ropes are free of kinks.
 - Multiple part lines are not twisted.
 - The primary attachment point is center over the platform.
 - There is no slack in the wire rope.

6.6. Operations during Hoisting

- 6.6.1. Employees will use personal fall protection. A fall arrest system (lanyard attached to the back D ring) will be attached to the personnel platform, lower load block or the overhead ball.
- 6.6.2. Ensure all employees keep all body parts inside the platform during raising, lowering, and positioning.
- 6.6.3. Make certain the platform is secured before exiting or entering unless it creates an unsafe situation.
- 6.6.4. All materials and tools must be secured and evenly distributed to balance the load.



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- 6.6.5. Hoisted employees shall stay in direct view or communication with the crane operator at all times. In some cases a signal person may be used. (Hand signal chart is located in Appendix C).
- 6.6.6. The crane operator must be at the controls when the engine is running or when the platform is occupied.
- 6.6.7. Stop all hoisting operations if there are signs of dangerous weather conditions or other impeding danger.
- 6.6.8. When the occupied platform is in a stationary position, the operator will ensure all brakes and locking devices are set.

7 PROGRAM REVIEW AND REVISION

- 7.1. The Regional Health and Safety Manager shall perform an annual assessment of this program. The assessment will address the degree and consistency of program element implementation in the workplace.

8 DISCIPLINARY POLICY

- 8.1. All employees are expected to adhere to the procedures given in this written program. Failure to comply will result in disciplinary action as described in SBA's disciplinary action policies.

9 RECORDKEEPING

- 9.1. The Safety Department shall maintain the following information:
 - All employee-training records will be maintained for at least two years from the last training date.

**APPENDIX A
Ride the Line Permit**

Ensure this permit is completed and all requirements have been fulfilled before hoisting any personnel. The crew will complete a new permit each day of the project and anytime there is a change made to the hoisting system (new equipment, location).

Job Information						
Job Name		Date		Height of Work		
Equipment (Safety Factor 10 to 1)						
Hoist Model		Rated Capacity				
Gin Pole Model		Rated Capacity				
Man-rated Hoist	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Gin Pole load charts on site	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Hoist manual on site	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Hoist hour meter operational	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Hoist maintenance log on site	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Machine Guards in place	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Hoist secured and anchored	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Hoist controls are identified	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Is the anti-two block operational?				Yes <input type="checkbox"/>	No <input type="checkbox"/>	
If no because of radiation frequency (RF) describe below how the crew will prevent two blocking from occurring.						
Guide/tag lines to be used?				Yes <input type="checkbox"/>	No <input type="checkbox"/>	
If no explain why:						
Pre Lift Meeting						
Has a pre-lift meeting been conducted?				Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Items discussed during the meeting?						
Proof/Load Test, Trial Lift, and Inspections						
Proof test conducted.				Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Type of Test conducted:	<input type="checkbox"/> Dynamometer		<input type="checkbox"/> Object			
Must 125% of intended load. Suspended for 5 minutes.	Date of calibration:		Description of object:			
	Dynamometer setting		Weight of object			
Results of Proof /Load Test.	<input type="checkbox"/> Pass		<input type="checkbox"/> Fail			
Trial Lift performed.				Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Results of the Trial Lift.	<input type="checkbox"/> Pass		<input type="checkbox"/> Fail			
Inspections completed after proof test and trial lift.				Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Rigging/Wire Rope	<input type="checkbox"/> Pass		<input type="checkbox"/> Fail			
Hoist/Winch	<input type="checkbox"/> Pass		<input type="checkbox"/> Fail			
Gin Pole	<input type="checkbox"/> Pass		<input type="checkbox"/> Fail			
Personal Fall Protection	<input type="checkbox"/> Pass		<input type="checkbox"/> Fail			
Radios	<input type="checkbox"/> Pass		<input type="checkbox"/> Fail			
Operator Qualification Card				Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Acceptable personnel hoisting conditions have been satisfied?				Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Title	Name			Signature		
Supervisor						
Hoist Operator						
Employee being hoisted						
Employee being hoisted						
Employee being hoisted						

APPENDIX B

Personnel Platform Hoisting Permit

Ensure this permit is completed and all requirements have been fulfilled before hoisting any personnel. The crew will complete a new permit each day of the project and anytime there is a change made to the hoisting system (new equipment, location).

Job Information					
Job Name		Date		Height of Work	
Equipment (Safety Factor 10 to 1)					
Crane Company		Rated Capacity			
Platform Type		Rated Capacity			
Crane Annual inspection on site	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Boom Angle indicator	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Hooks have positive locking safety latches				Yes <input type="checkbox"/>	No <input type="checkbox"/>
Is the anti-two block operational?				Yes <input type="checkbox"/>	No <input type="checkbox"/>
If no because of radiation frequency (RF) describe below how the crew will prevent two blocking from occurring.					
Guide/tag lines to be used?				Yes <input type="checkbox"/>	No <input type="checkbox"/>
If no explain why:					
Pre Lift Meeting					
Has a pre-lift meeting been conducted?				Yes <input type="checkbox"/>	No <input type="checkbox"/>
Items discussed during the meeting?					
Proof/Load Test, Trial Lift, and Inspections					
Proof test conducted.				Yes <input type="checkbox"/>	No <input type="checkbox"/>
Must 125% of platform's rated capacity. Suspended for 5 minutes.	Description of test object:				
	Weight of object				
Results of Proof /Load Test.	<input type="checkbox"/> Pass			<input type="checkbox"/> Fail	
Trial Lift performed.				Yes <input type="checkbox"/>	No <input type="checkbox"/>
Results of the Trial Lift.	<input type="checkbox"/> Pass			<input type="checkbox"/> Fail	
Inspections completed after proof test and trial lift.				Yes <input type="checkbox"/>	No <input type="checkbox"/>
Rigging/Wire Rope	<input type="checkbox"/> Pass			<input type="checkbox"/> Fail	
Personal Fall Protection	<input type="checkbox"/> Pass			<input type="checkbox"/> Fail	
Personnel Platform	<input type="checkbox"/> Pass			<input type="checkbox"/> Fail	
Radios	<input type="checkbox"/> Pass			<input type="checkbox"/> Fail	
Acceptable personnel hoisting conditions have been satisfied?				Yes <input type="checkbox"/>	No <input type="checkbox"/>
Title	Name		Signature		
Supervisor					
Crane Operator					
Employee being hoisted					
Employee being hoisted					
Employee being hoisted					

POST AT CRANE OPERATOR'S STATION AFTER COMPLETION.

APPENDIX C
Hand Signal Chart

**HAND SIGNALS FOR
HOISTING OPERATIONS**

Load Up



Load Down



**Load Up
Slowly**



**Load Down
Slowly**



Boom Up



Boom Down



**Boom Up
Slowly**



**Boom Down
Slowly**



**Boom Up
Load Down**



**Boom Down
Load Up**



**Everything
Slowly**



**Use Whip
Line**



**Use Main
Line**



**Travel
Forward**



Turn Right



Turn Left



**Shorten
Hydraulic Boom**



**Extend
Hydraulic Boom**



**Swing
Load**



Stop



Close Clam



Open Clam



**Dog
Everything**



APPENDIX D
Inspections for Hoists

1 Man-rated hoists

- 1.1. All hoists shall be inspected thoroughly at three-month intervals by a qualified person, as will any hoists that have been idle for more than one month but less than six months. Such inspection will include a hands-on operation of all moving parts to ensure that they are intact and will properly function before being put into service.
- 1.2. All hoists shall undergo a teardown inspection annually unless the following conditions exist that allow for less frequent teardown inspections.
 - 1.2.1. A hoist that has been idle for a period of over six (6) months shall be given an annual inspection that includes the hoist being completely disassembled, cleaned, and inspected. Parts such as pins, bearings, shafts, gears, brake plates, etc. found worn, cracked, corroded, distorted or otherwise non-functional must be replaced before the hoist is used.
 - 1.2.2. Hoists with infrequent to moderate usage (hoists that have been used for fifty (50) hours or less per month and normally operate at considerably less than the hoist rated capacity based on the average use over a month) may go up to thirty-six (36) months between tear down inspections if serviced under a preventive maintenance program (as specified by the manufacturer) that includes annual hydraulic oil sample analysis. An oil sample analysis, meaning a laboratory analysis, is used to evaluate the mechanical integrity of the hoist. Oil in these hoists shall be changed at least on an annual basis; just after the oil analysis is performed. Hoists not subjected to a recommended oil sample analysis shall undergo an annual teardown inspection.
 - 1.2.3. Hoists that experience heavy usage (hoists that are used for more than fifty (50) hours per month) may go up to twenty-four (24) months between tear-down inspections if serviced under a preventive maintenance program as in (1.2.2) above.
 - 1.2.4. Any rebuilt hoist assembly must be line pull tested to the rated load. The hoist drum must be rotated several times in both raising and lowering directions under full-rated load, while checking for smooth operation.

APPENDIX E INSPECTION GUIDELINES

These guidelines are to be used by the crew to inspect the equipment prior to use on each shift.

WIRE ROPE SLING INSPECTION PROCEDURE

- Inspect the wire rope sling to insure that there are not ten randomly distributed broken wires in one rope lay, or six broken wires in one strand in one rope lay.
- Inspect the wire rope sling to insure that the wear or scraping is not more than 1/3 the original diameter of outside individual wires.
- Inspect the wire rope sling for kinking, crushing, bird caging, or other damage resulting in distortion of the wire rope.
- Inspect the wire rope sling for evidence of heat damage.
- Inspect the wire rope sling end attachments for cracking, deformities and wear.
- Inspect the wire rope sling for corrosion of the rope or end attachments.

RIGGING ACCESSORIES USER'S GUIDELINE (Shackles, ropes, eyebolts, turnbuckles, etc.)

- Inspect for any cracks in the rigging equipment.
- Inspect the rigging equipment for distorted or deformed parts.
- Inspect for any sign of beginning failure in shear for shackle pins.
- Inspect the rigging equipment for excessive wear.
- Inspect the rigging equipment for excessive corrosion.
- Inspect for shackle markings permanently and legibly on the body by the manufacturer in raised or stamped letters on the side of the bow to show the manufacturer's name, shackle size, and rated capacity.
- Inspect the shackle for excessive spreading in the shackle leg.
- Inspect the shackle pin, is it the original pin (not a bolt), is it straight, and are the threads undamaged.
- Inspect the eyebolts, are they the shouldered, forged type.

GIN POLE INSPECTION PROCEDURE

- Is there a permanently affixed load-rating chart attached supplied by the manufacturer.
- Perform an inch-by-inch inspection for bends, cracks in any section, broken welds or any other markings tending to weaken the gin pole been completed.
- Inspect all parts of the rooster head for freedom of movement and lubricate prior to use.
- Inspect all rigging attachments to be used with the gin pole thoroughly for any deformities or weaknesses in accordance with the individual equipment checklist.
- Provide Tower climbers and Gin Pole operators radio communication to prevent communication problems during tower erection/construction activities.
- Make sure the gin pole is properly anchored at ground by truck or other means.
- Make sure the annual inspection of the gin pole has been performed and the documentation is on the project site.
- Make sure operator directions for the controls are posted at the operator station on the gin pole

NOTE: ANY DEFICIENCIES ARE GROUNDS FOR TAKING THE EQUIPMENT OUT OF SERVICE UNTIL REPAIRED.